Chapter 1 **Summary**

Only sections or other elements of Chapter 1 revised for the Final EIS are included here. These changed sections combined with the unchanged sections of Chapter 1 in the Draft EIS constitute Chapter 1 of the Final EIS. Please see the introduction to the "Changes Made in the Draft EIS in Response to Comments" section for a full explanation.

The following changed elements of Chapter 1 are presented on the indicated pages. All other sections of Chapter 1 remain unchanged from the Draft EIS. Please consult the Draft EIS for those sections.

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Chapter 1 Summary

This chapter provides a summary of the information contained in the Final Environmental Impact Statement (EIS) for the Carnation Wastewater Treatment Facility. The chapter begins with an overview of the proposal to construct and operate a new facility to meet the wastewater treatment needs of the City of Carnation, Washington. The facility would consist of a treatment plant, conveyance pipeline, and discharge facilities. After this overview, the chapter briefly describes treatment facility alternatives evaluated in the EIS, including the No Action Alternative. Other information provided in this chapter includes summaries of timing, environmental impacts, mitigation measures of the proposal, and areas of uncertainty and issues to be resolved concerning the proposal. All references and figures cited in this and the other chapters of this EIS can be found at the end of the chapters.

On June 28, 2004, King County issued a Draft EIS under the State Environmental Policy Act (SEPA) to provide environmental information to the public and agencies and to solicit comments on the proposals and issues discussed in the EIS. King County accepted comments on the Draft EIS during a 30-day public review period. See the Fact Sheet at the beginning of the EIS for details. The Final EIS responds to all substantive comments on the Draft EIS submitted during the comment period.

Pursuant to WAC 197-11-560(5), this Final EIS has been prepared in the form of an addendum. The Final EIS consists of the Draft EIS and the addendum. The addendum consists of an updated fact sheet, responses to comments received on the Draft EIS and changes to the EIS. Copies of the addendum are being sent to recipients of the Draft EIS and those who commented on the Draft EIS.

The King County Executive, in consultation with the City of Carnation, will use the environmental information in the Final EIS along with cost, engineering, community, and policy information to make a decision on the Carnation Wastewater Treatment Facility.

1.1.1 Change in Project Description

There have been two changes in the project description since the Draft EIS was issued. The first change is that a one-acre parcel adjoining the northeast edge of the City-owned site described in the Draft EIS has been added to that site (see revised Figure 1-2). This parcel is also owned by the City. A single-family residence and outbuilding currently occupy the parcel. See Chapter 3 for further information. The second change is that the construction period for the basic wetland discharge option could be as long as 6 to 8 weeks. Neither of these changes would substantially change the impacts discussed in the Draft EIS.

1.3 Benefits and Disadvantages of Reserving for Some Future Time the Implementation of the Proposal

As stated in the State Environmental Policy Act (SEPA) (WAC 197-11-440[5][c][vii]), an agency preparing an EIS should discuss the benefits and disadvantages of reserving for some future time the implementation of the proposal as compared with possible approval at this time. The agency perspective should be that each generation is, in effect, a trustee of the environment for succeeding generations. Particular attention should be given to the possibility of foreclosing future options by implementing the proposal. King County has evaluated the issues and impacts associated with delaying or moving ahead with the Carnation Wastewater Treatment Facility project.

As explained in the section of this chapter on the purpose and need for the project, the City is currently a "public health hazard" area as declared by the Public Health-Seattle & King County in 1988 and reaffirmed in 2003. The public health hazard has to do with failing septic systems, which are a source of pollution to ground and surface waters. Deferring the wastewater treatment facility will prolong and exacerbate this adverse condition; thus the project needs to move ahead. In this case, Carnation's proximity to important salmonid habitat that includes prime Chinook spawning areas highlights the environmental necessity of proceeding with the project.

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1.9.5 Water Conservation

Water conservation has been shown to potentially reduce water consumption rates and thus the volume of wastewater to be treated. The feasibility of conservation measures to reduce the amount of water used and then discharged to the wastewater system for collection and treatment was analyzed in the "City of Carnation 2004 Comprehensive Sewer Plan" (Carnation, 2004). In addition, King County evaluated water conservation measures in planning the Carnation Wastewater Treatment Facility. The evaluation is included in "Carnation Wastewater Treatment Facility Technical Memorandum No. 2 Population, Flow, and Loads" that has been published with the Final EIS (Carollo, 2004).

Water conservation opportunities include installation of low-flush toilets and low-flow showerheads, faucets and appliances (such as clothes washers) and leak repair in residences and/or businesses that would reduce the amount of water used. This approach to water conservation has been tested and/or implemented to various degrees in many U.S. cities including San Francisco and Albuquerque as well as throughout the world in countries such as Canada and Australia (Carollo, 2004).

To evaluate water conservation opportunities, four levels of flow assumptions were analyzed to provide a range of what could possibly be achieved. These levels are described below.

The first level of flow assumptions (Option 1) is based upon simply applying the existing building codes to all new development. The second level of flow assumptions (Option 2) considers upgrading all of the existing residents to meet the current building code requirements. The third level (Option 3) assumes implementation of an aggressive water appliance (such as clothes washing machine) retrofit program with full retrofitting of all existing and future residential homes. The fourth level (Option 4) adds retrofit of businesses and schools to the residential retrofit in Option 3.

The "City of Carnation 2004 Comprehensive Sewer Plan" and King County Carnation Wastewater Treatment Facility "Technical Memorandum No. 2 Population, Flow, and Loads" make the following conclusion on the implementation of water conservation options discussed above.

The City has already planned for a more moderate level for water conservation. Committing to an aggressive water demand management capital program as represented by Options 2-4 would require that both the City and County accept a certain amount of risk in that the design of the treatment plant and the collection system would be based upon reduced flows resulting from these efforts. Likewise, the current design is conservative with the resulting risk of designing facilities that are larger than necessary and therefore more costly. If the conservation program proved to be ineffective and the reduced flows are not realized, or realized to a lesser extent, then the sewer system would have to be upgraded, at significant cost, to accommodate increased flows. Additionally, zoning changes may occur when sewer is imminent that may allow for zoning designations with increased densities in certain portions of the City which would tend to increase overall flows.

We recommend that the cost savings for the treatment plant and the program cost for the demand management program be further refined and evaluated at the facilities planning stage of the project. The City of Carnation will consider implementing the most aggressive demand management program that in the City's opinion, using its reasonable assumptions, provides a positive benefit/cost ratio to the citizens of Carnation. The benefits to the citizens of Carnation may or may not be the same as the benefits to the overall sewer project (Carnation, 2004).

At this writing it has not been determined which additional conservation measures will be employed in Carnation. Should conservation measures reduce the capacity of wastewater facilities, construction impacts would be similar or somewhat less than those discussed in this Final EIS (e.g., potentially smaller quantities of excavated materials and resulting truck haul trips). The amount of impervious surface at the treatment plant might also be reduced somewhat, depending upon how much capacity could be reduced. Energy needs to treat reduced wastewater volumes could be reduced, although solids volumes would not be reduced and more concentrated wastewater could require more energy for some process elements. The volume of water discharged to the river, wetland or upland site would be reduced, although the volume of contaminants remaining after MBR treatment would be the same.

Besides potential reductions in size and impacts of wastewater facilities, conservation would reduce the amount of potable water that the City of Carnation must treat and convey to end users. Further, retrofitting with low flow washing machines would reduce water heating and clothes drying demands in residences. Both of these would yield savings in energy use. In addition, more water would remain in surface water rather than being diverted to domestic use, potentially improving stream flows during low water months.

1.10 Public and Agency Review

Beginning in January 2003, King County conducted extensive public involvement activities for the project. Some of these activities are as follows:

- Twenty-five interviews with community and interest group representatives to gather input regarding concerns, issues and opinions about the treatment facility and ways to involve the public
- Four Citizen Advisory Committee meetings on facility siting, to obtain input on the development and application of siting criteria, and on the results of the siting process
- Six community meetings to provide information about the project, obtain feedback on the siting process and criteria, and discuss the treatment process and discharge options and explain the decision process and factors
- A site tour at Stillwater Wildlife area in conjunction with the Washington State
 Department of Fish and Wildlife, to discuss the wetlands enhancement discharge options
- Numerous meetings with property owners near the treatment plant sites and discharge locations
- Attendance and participation at the City of Carnation's open houses and City Council meetings
- Frequent briefings to tribes, political leaders and community and interest groups
- A charrette to identify wetland discharge alternatives, attended by stakeholder groups, permitting agencies, and resource agencies.
- Three fact sheets to provide information about the project
- An ongoing project Web site, to provide updated project information
- Staffing an information booth at Carnation's Fourth of July Festival each year
- A toll-free telephone number and e-mail address to receive public input and questions
- Three newsletters and several updates mailed to area citizens and project update mailings to a distribution list developed during activities listed above
- Responses to requests for information and questions from individuals and groups

In summer 2003, King County conducted an expanded SEPA scoping process for the Draft EIS under WAC 197-11-410. As lead agency for SEPA review, King County issued a Determination of Significance and scoping notice on July 28, 2003. The scoping notice described the alternatives being considered and requested comments on issues and alternatives to be addressed in the EIS.

About 4,000 scoping notices were distributed to potentially affected parties. A public hearing/open house was held at the Carnation Elementary School on August 6, 2003. A separate meeting for regulatory agency representatives was also held on that day. A notice was provided

on the project Web site, legal notices were placed in local newspapers, and other legal notification requirements were met. King County allowed more than 45 days for scoping comments to be prepared and submitted. The comment period ended on September 12, 2003.

King County received a total of 76 individual scoping comment submittals (letters, e-mails, mailback comment forms from the scoping notices, and/or testimony to a court reporter) from 66 parties. Many submittals contained multiple comments. Of the 66 commenters, 53 were individual citizens, 9 were public agencies and 4 were interest groups or other organizations.

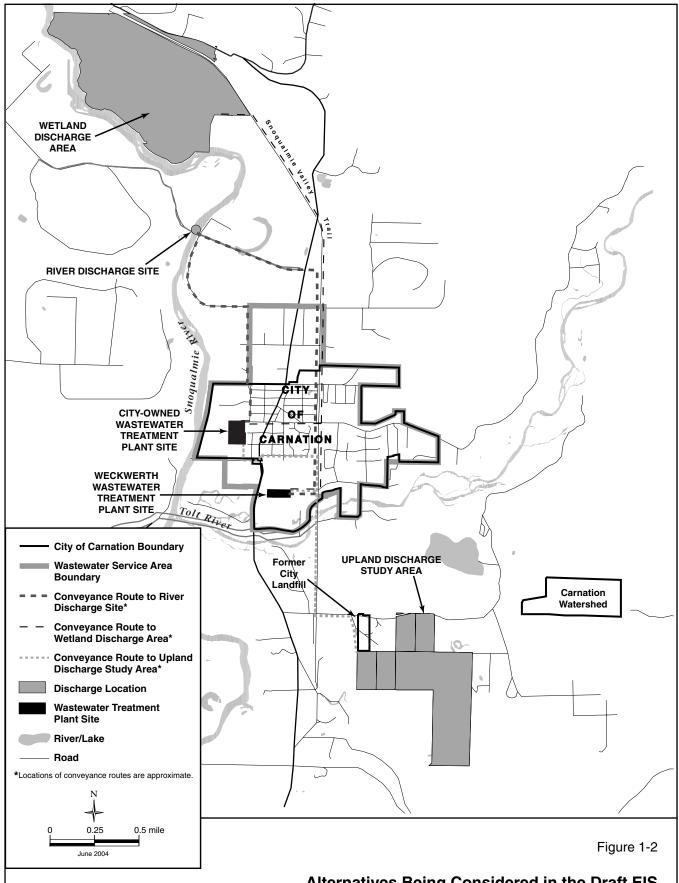
King County issued a Draft EIS on June 28, 2004 to provide environmental information to the public and agencies and to solicit comments on the proposals and issues discussed in the EIS. King County provided a 30-day public comment period for interested citizens, groups, agencies and governments to review the EIS and provide comments. A public hearing was held on July 14, 2004 to receive public testimony on the Draft EIS. The public comment period closed on July 27, 2004.

King County received comments from a total of 28 individuals, groups and government agencies. Of these, 19 were individuals, 8 were government agencies, and 1 was a private group. The comments and King County's responses are provided in this Final EIS.

The Final EIS will be one of the tools used by the King County Executive, in consultation with the City of Carnation, in making a decision on the Carnation Wastewater Treatment Facility. The Final EIS provides information on the potential environmental impacts of the proposal. The Executive and the City of Carnation will take these and other factors, including cost, engineering, community, and policy issues, into account in reaching a final decision.

1.11 References

- Bishop, G. 2003. Supervisor, Community Environmental Health, Public Health-Seattle & King County. Letter to City of Carnation regarding Sewer Development in the City of Carnation. September 9, 2003.
- Carnation, City of. 2004. 2004 Comprehensive Sewer Plan. Carnation, WA: City of Carnation.
- Carnation, City of. 1997. City of Carnation 1996 Comprehensive Plan. Carnation, WA: City of Carnation.
- Kleeberg, C. 1988. Director, Environmental Health Division, Public Health-Seattle & King County. Letter to City of Carnation regarding Sewer Development in the City of Carnation. April 19, 1988.





Alternatives Being Considered in the Draft EIS CARNATION WASTEWATER TREATMENT FACILITY FINAL EIS

Department of Natural Resources and Parks Wastewater Treatment Division

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